



Joint Warrior Interoperability Demonstration (JWID) 2003

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LCDR Porfirio Beltran explains the concept of operations to Commander Hoon Lee, South Korea Navy. Beltran is assigned to the Navy and Marine Corps Reserve Center in Washington, DC.

JWID is a Chairman of the Joint Chiefs of Staff annual event that enables U.S. Combatant Commands and the international community to investigate command, control, communications and computer solutions that focus on annually determined objectives for enhancing coalition interoperability. The U.S. Pacific Command (PACOM) hosted the June 2003 event with the U.S. Army and U.S. Marine Corps (USMC) collocated at the Naval Surface Warfare Center Dahlgren Division (NSWCDD), Dahlgren, VA. There were 42 Coalition Interoperability Trials with 19 in use at Dahlgren supporting 6 objectives. Soldiers from the 34th Infantry Division (ID) provided operational assessments of emerging technologies while sharing situational awareness data with the other services and 10 coalition partners.

For the first time, we were able to pass fire missions to and from Spain using the Advanced Field Artillery Tactical Data System (AFATDS). Other key technologies included language translation, network monitoring and shared geospatial awareness. The 34th ID operated a brigade tactical operations center

(TOC) under the Combined Forces Land Component Commander. The TOC used the Maneuver Control System Light, All Source Analysis System Light and AFATDS to share the common relevant operational picture products with the Global Command and Control System and the USMC

Command and Control Personal Computer System. This article describes the key victories from the exercise.

Interoperability Among Artillery Groups

For the first time, the Army exchanged field artillery fire missions with Spain using the Artillery Systems Cooperation Activity standard over a network. Sponsored by the Spanish Joint Chiefs of Staff, this trial allowed fire support planners from the 34th ID to conduct fire missions, send and receive geometries and then send and receive unit locations with Spanish units. This highly successful trial bodes well for vastly improved interoperability with an important ally.

Geospatial Awareness

The U.S. Army Engineer Research and Development Center and the Topographic Engineering Center provided a geospatial environment for

network-centric tactical awareness. This trial provided joint and coalition operations and intelligence officers actionable decision products and decision tools in a distributed environment.

After action reports from Iraq and Afghanistan suggest that paper maps and mapboards have yielded to digitized and vector products. One notebook computer can now store maps and images that would have previously filled the commander's vehicle. Additionally, digitized images and vectors can provide three-dimensional views, sophisticated terrain analysis and "fly-through" capabilities that allow commanders to truly visualize their battlespace. This trial made these products and others available through a Web interface.

Language Translation

Several trials focused on language translation problems. Imagine trying to coordinate the efforts of coalition forces from Korea, Japan, Singapore and Thailand.

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Commanders still experience difficulty communicating with English-speaking countries such as Great Britain, Canada, Australia and New Zealand. Though language translation in the commercial sector is maturing, the problem of translating domain-specific terminology and acronyms remains extremely challenging.

During the exercise, vendors successfully demonstrated several tools. AT&T demonstrated a prototype military application of its telephony-designed automated speech recognition translation technology. Combined with AT&T's Mandolin™ and Natural Voices™ components, and the ANUVADD machine translation technology, AT&T provided a multi-lingual text and speech interface tool used to facilitate the translation of critical information between the United States and Spain. The prototype application provided users with an instant messaging type (chat) translation process for both text and voice. Their

automated text and speech recognition/translation tool provided English and Spanish text translation via instant messaging technology. The tool also provided prototype speech recognition and voice translation capabilities for both English and Spanish languages.

JWID 2004

Though some battles were won, the campaign continues. Northern Command will be the host combatant commander for JWID 2004 and 2005. Northern Command will continue to work the tough problems associated with service and coalition interoperability and will dedicate the upcoming exercises to improving interagency interoperability. With the ongoing global war on terrorism, creation of the Department of Homeland Security and increased need to exchange intelligence among multiple agencies, the importance of interoperability and JWID will increase significantly. Thanks to all who made 2003 a success; see you in Colorado Springs, CO, in 2004! For more information on JWID, visit www.jwid.js.mil.

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Commander Hoon Lee, South Korea Navy (center), briefs JWID operations to coalition partners at PACOM Headquarters, Camp H.M. Smith, HI.